



DAIRY

Kansas is one of the fastest growing dairy regions in the U.S. in terms of milk production, due to a variety of factors that make the state a prime location for dairy operations. Land availability, a ready supply of feed, and an ideal climate provide a good foundation for dairy growth, and the efforts being made toward proactive water policies enhance the viability of future dairy farm expansion. Recent additions to processing operations within the state have significantly increased the ability for dairy farmers to process their product within the state, rather than exporting milk for processing. Several facilities within Kansas have actively worked to develop innovative strategies to add value to their product and to minimize their water use in order to increase efficiency and long-term viability.

Despite the growth seen in recent years, several challenges remain which serve as barriers to future dairy expansion. Water rights continue to be in demand in many areas of the state, and obtaining land with sufficient water rights can be



difficult. Attracting a qualified workforce is a continual concern, as well as managing the challenges of an immigrant workforce, and issues of wastewater disposal and transportation impact the dairy industry on a regular basis. Opportunities to grow as a result of exports are impeded by fluctuating prices and international policies that affect milk products.

To build on the factors that have led to success in the dairy industry and to overcome these barriers to future growth will require collaboration among the public and private stakeholders in the industry. Identifying new technologies and strategies to conserve water in regions of Kansas that would be conducive to new dairies would positively impact the dairy industry, and adjustments to transportation policy could have a similar impact. Increased focus on education and workforce issues specific to the dairy industry could also enhance possibilities for growth of the dairy sector in Kansas.

STATUS

Kansas is the 16th-ranked dairy state for milk production and is home to 160,000 dairy cows on 300 dairy farms. Approximately 80-85 percent of the milk produced in the state is produced in western Kansas on 29 large farms that originated since 1994. Milk processing capacity has grown in the state since 2012 with the addition of processing facilities in Rexford, Garden City and Hugoton. There are also milk plants of recognizable size in Hutchinson and Wichita. The recent addition of the DFA plant in Garden City has allowed an estimated 75 percent of milk produced in Kansas to now stay within the state to be processed.

Kansas has consistently ranked as one of the fastest growing dairy states. Kansas has established itself as a prime location in the U.S. for dairies with its abundant land, feed supply, ideal climate, proactive water policies and positive business environment. Milk production in Kansas has doubled since 1994 and is now a one billion dollar industry.

According to estimates prepared by the Kansas Department of Agriculture and based on the IMPLAN economic data model, the Kansas dairy industry has a direct output of almost \$532.4 million and a total economic contribution of approximately \$994.8 million. The industry creates 1,337 jobs directly, and with indirect and induced impacts the total number of jobs grows to 3,825.

OPPORTUNITIES

Kansas is considered to be a major dairy expansion state and likely will continue to expand. The following factors outline our comparative advantage and the opportunities that exist to influence the dairy industry's growth in Kansas.

Factor	Implications for Growth and Development Opportunities
Feed Supply and Land Availability	<p>Kansas is the seventh-ranked corn producing state and produces over four million tons of corn silage annually. Distiller's grains are available from local ethanol plants. Kansas is also known for raising high-quality alfalfa hay, growing more than 490,000 acres in 2018. Kansas is home to many excellent custom forage growers with experience in producing top-notch forage for dairies and feedlots.</p> <p>Obtaining land for dairy farms is comparatively much cheaper than in other dairy states, reducing start-up costs for new operations. Despite a cheaper price, this land still produces high yields of feed and forage and has a good supply of water.</p>
Heifer Development	<p>The existing livestock industry and growing number of heifer raising operations provide local and regional replacement heifer options. Kansas also has a large number of empty feedyards for sale that can easily be converted to heifer development facilities for raising heifers for out-of-state dairies.</p>
Kansas State Univ. Educational Resources	<p>Kansas State University offers a dairy teaching program to both undergraduate and graduate students. Courses offered range from fundamental to advanced genetics, nutrition, management, reproduction, animal health and milk processing. These classes, along with student programs, develop the next generation of leaders needed to maintain the state's dairies on a long-term basis. Nationally recognized faculty research programs at K-State directly support the dairy industry in the state along with K-State Research and Extension outreach programs in nutrition and management, physiology and dairy foods.</p> <p>In 2018, K-State approved a plan to build a \$13 million state-of-the-art dairy research facility on campus. Fundraising will begin soon.</p>

Factor	Implications for Growth and Development Opportunities
Milk Processing Expansion	The number of milk processing and production support businesses in Kansas continues to grow. This has created new market outlets for milk producers locally, which reduces the expense of transporting milk over long distances. Kansas dairy processing facilities are increasingly becoming vertically integrated as farmers capture more of the value of the supply chain.
Policies and Guides	<p>Counties are not allowed to impose additional health and environmental regulations in excess of those mandated by the Kansas Department of Health and Environment livestock waste management section. This provides clarity and consistency for livestock producers in their ability to successfully manage their operations.</p> <p>A Relocation and Expansion Guide assisting in site selection and regulatory guidance is available for dairy producers, which expedites the process of opening a new facility within the state.</p>
Water	<p>Kansas is recognized nationwide for its proactive practices of conserving water for future generations. Kansas has existing water rights available and is implementing proactive water conservation practices allowing farmers and ranchers to manage their own water while still preserving the aquifer for generations to come. Kansas has developed a <i>Vision for the Future of Water Supply in Kansas</i>, which aligns the priority of growing the economy with the strategies and actions necessary to ensure a reliable water supply is available to support that growth.</p> <p>Dairies have access to available water rights which can be obtained easily as they are bought and sold as a personal property right. Many water rights have sufficient capacity to support large dairy farms. Resources are also available to farmers to determine where the best wells may be located and state water staff can assist in determining life expectancy of water in certain locations to ensure future farm viability.</p>

CHALLENGES

While Kansas is poised for major dairy expansion, the following factors represent challenges serving as barriers to achieving the objective of the dairy growth plan.

Challenge	Details of Challenge
Corporate Farming	Kansas corporate farming regulations inhibit the ability of Kansas dairy owners to find partners in financing and operating new dairy operations. They also prevent out-of-state dairy owners from expanding into Kansas in many of the 105 Kansas counties.

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International Trade	The U.S. dairy industry is becoming increasingly affected by international dairy markets. A current surplus of milk supply worldwide has greatly suppressed domestic milk prices. While the U.S. must become more competitive on the world market, risk management strategies are needed to help protect from major price swings. The U.S. must also counter protectionist milk policies, such as a potential U.S. milk protein concentrate ban from Canada, poor dairy-specific Trans-Pacific Partnership negotiations, or Russian bans on dairy and ag products.
Processing Facility Wastewater Disposal	A significant amount of wastewater is generated by dairy processing facilities, particularly those which condense or dry milk. Identifying suitable quantities of land for waste application and securing adequate storage when land application is not feasible is challenging and the cost of treatment for onsite reuse can be costly. However, if the challenges associated with storage and treatment can be addressed, the wastewater can represent an opportunity to address declines in the aquifer and drought conditions.
Threatened and Endangered Species	Threatened and endangered species reduce the pace or viability of new projects and expansions. An example of this includes the lesser prairie chicken, which until late 2015 was listed as a threatened species under the Endangered Species Act. While a court order vacated the listing of the chicken, future listings of this or other species may delay or stop construction of new and expanding dairy operations.
Water	Many areas of western Kansas are closed to new appropriations for water rights. Therefore, incoming or expanding operations needing water must purchase existing water rights. Obtaining tracts of land with sufficient water rights can prove challenging for large dairies because areas with excellent water rights do not experience land ownership turnover at high rates.
Workforce Development	Access to a sufficient workforce has been identified as a barrier to growth for many agricultural-related and rurally situated industries. Most immigrant visa programs for agriculture are for temporary workers which aren't effective in a dairy setting where cows must be cared for daily. (Some visas will allow for workers to feed cows, but will not allow for them to milk cows, which is the most common labor need on the farm.) Related workforce issues include the lack of available housing for all income levels and incredibly low unemployment rates. Attracting highly qualified dairy owners and upper management also proves challenging due to quality of life adjustments compared with California and the Colorado front range where access to amenities and entertainment is more readily available.

SUCCESSSES

Key successes in the dairy industry:

- Southwest Kansas is home to the largest single-dryer dairy processing plant in North America, which recently received the Sustainable Plant of the Year award.
- Kansas dairies are innovative. Kansas is home to a 110-cow rotary — the largest rotary milking system in North America — and soon to one of the two largest fully robotic rotary platforms currently sold.
- Since 2008, Kansas dairies have increased milk production by 45 percent.
- Milk processing has grown significantly with the addition of three milk processing facilities since 2011; 75 percent of all Kansas milk is now processed in the state.
- Kansas has increased its national presence in the dairy industry by participation in three national trade shows, engaging with ten dairy operators interested in relocation.
- Four Kansas dairies in the last five years have been selected to be featured as virtual farm tours at the World Dairy Expo.
- The Kansas dairy industry partnered with Kansas State University to offer the first dairy career exploration seminar for secondary students.
- KSU, industry partners and KDA are partnering to design a new state-of-the-art K-State dairy research facility that will include expansion to 500 milking cows and robotics.
- Kansas is a national leader in the development of Secure Milk Supply plans at dairy operations, and 14 Kansas dairies have completed or are in the process of developing site-specific biosecurity plans as of February 2019.
- In 2015, a dairy in southwest Kansas became the first dairy in the state to implement a Water Conservation Area (WCA) management plan — a voluntary tool used to reduce water use in exchange for flexible water right management — at one of their three locations. Following the adoption of the consent agreement for this WCA, the dairy plans to implement WCAs at their other facilities.
- In 2012, a dairy in northwest Kansas constructed a new milk condensing facility to add value to their milk for a direct marketing partnership with an international company. The farm now condenses the milk from their farms to approximately 30 percent of original volume and ships it to processing facilities in Texas in a cost-plus model.

Dairy

GROWTH OBJECTIVE:

Enable consistent annual growth in milk production by expanding access to milk markets, maintaining low feed costs and preserving a valued labor force, while also upholding a trustworthy perception of an industry that provides wholesome dairy products.



OUTCOMES & ACTION ITEMS

Leaders from throughout the Kansas dairy industry will continue to collaborate in the development and implementation of a long-term strategic growth strategy with input and discussion among key partners. Industry-identified desired growth outcomes, initially developed in 2016 and expanded to include action items, will be implemented by industry and key partners and updated annually at the Kansas Governor's Summit on Agricultural Growth. Following are the proposed action items to continue building on the achievement of the dairy sector desired outcomes.

High Priority Outcomes

Federal immigration reform with a focus on long-term visas for agricultural workers, and a potential immigration pilot program in Kansas.

ACTION ITEMS:

- Create a report thoroughly documenting the issues dairy producers face on a daily basis in securing an adequate legal workforce.
- Draft a workable solution to current immigration challenges that will alleviate challenges the dairy industry faces.
- Submit the report to Kansas congressional delegation.
- Work with Kansas congressional delegation to secure an alternative workforce program to fill the talent and workforce needs of the industry.
- Develop multi-generational success stories of agriculture families built on immigration.
- Improve information and education in local communities on the visa application process.
- Increase public outreach and information on the need for federal immigration reform.

New university dairy teaching and research facilities that adequately meet research and educational needs and spur economic growth.

ACTION ITEMS:

- Create a network of support in the dairy industry by engaging dairy farmers statewide in the need for a new dairy facility at K-State.
- Ensure dairy farmers across the state convey the importance of dairy to university leadership (department head, dean, president) through phone calls and written communication.
- Secure at least one dairy farmer on the search committee for the head of the K-State Animal Sciences & Industry department who will advocate for the need for a new university dairy farm.
- Secure a landmark funding source for a new K-State dairy facility to kick off a capital fundraising campaign.
- Explore opportunities for dairy expansion relating to NBAF development, including the use of STAR bonds to help secure funding.
- Begin an aggressive funding campaign through private donations and securing grants and gifts that align with the vision of creating a world-class teaching and research facility.
- Work with the Kansas Legislature to secure funding.

- Encourage investment by the whole agriculture industry, including other commodities, through opportunities for feeding trials.
- Ensure training goals are dual-purpose at facility — both dairy cow development and milking.
- Consider a demonstration farm as a means for fundraising.
- Use Call Hall as a conversation/learning area.
- Consider the role of robotics and other emerging technologies.

Dairy Beef processing facility for cull cows and fat dairy beef to keep processing of dairy cattle in Kansas and to spur economic growth.

ACTION ITEMS:

- Engage beef producers, county economic development, KLA, Farm Bureau, DFA, and state agencies to help secure company.
- Work with Kansas Department of Commerce to secure incentives for a processing facility.

A fully staffed Kansas Department of Health and Environment livestock waste management section resulting in expedient permitting while effectively protecting the natural resources of the state.

ACTION ITEMS:

- Employ an engineer in a time share between KDA and the KDHE livestock waste management section to support permit application review.
- Hold a roundtable discussion with KDHE, KDA and university engineering departments regarding student internships and employment.
- Seek approval to increase available salary range for engineer positions to encourage increased interest and applications for vacant positions.
- Evaluate permitting process, including existing rules and regulations, to determine if efficiencies or streamlining could be gained without compromising compliance with federal standards or water quality conditions.
- Conduct outreach and education with livestock operations on waste permit regulations and permitting process to improve the quality and completeness of submitted applications.
- Expand professional staff to review permit applications and nutrient management plans using on-call engineering contracts, engineer position-sharing among state agencies, and recruitment of university engineering students.
- Review salary structure for engineer positions to encourage increased interest and applications for vacant positions.

New dairy heifer development operations in Kansas, either by repurposing existing empty feedlots or by creation of new facilities.

ACTION ITEMS:

- Conduct a cost analysis of renovating or building dairy heifer development facilities in Kansas versus comparably sized facilities in the upper Midwest.
- Collaborate with Kansans possessing existing empty facilities or greenfield sites suitable for dairy heifer development.
- Share information and widely distribute cost analysis at trade shows and at media and industry events.

Expanded influence, presence and professional standing of the Kansas dairy industry with consumers and policy makers.

ACTION ITEMS:

- Work to leverage dairy promotion programs in Kansas to increase consumption of dairy products.
- Work to inform policy makers of the impacts of potential legislation on the Kansas dairy industry.
- Ensure that Kansas dairy farmers are involved in leadership development programs that will enhance their leadership contribution to the industry.
- Ensure that Kansas dairy farmers are comfortable sharing their story through leadership development programs, trainings, materials, etc.
- Work to leverage dairy promotion programs to educate pediatricians and dieticians on the importance and role of dairy in a healthy diet.

Comprehensive employee training programs to complement the needs of dairy processing facilities.

ACTION ITEMS:

- Work with Kansas milk processors to identify and list specific skills and skill sets needed. Specific job titles and skill sets have been developed for the new processing plant in southwest Kansas.
- Support private and public education providers which have been identified to provide training in specified subject areas.
- Continue to develop and implement training programs to match the needs of the industry and execute according to demand and frequency required by industry employers.

Medium Priority Outcomes

Growth in milk production through the addition of new dairies or expansion of existing facilities.

ACTION ITEMS:

- Continue dairy recruitment activities at World Ag Expo and World Dairy Expo, and maintain the dairyinkansas.com website.
- Cultivate relationships initiated during the Governor's dairy recruitment mission to California and at World Dairy Expo, targeting key dairy prospects.
- Continue exploring and promoting adoption of technology such as robotic milking.
- Develop case studies to prove and promote new methods.

New facilities for export of shipping containers via railway directly from western Kansas to prevent wasteful backhauls across state.

ACTION ITEMS:

- Support continued development of transload facilities in Kansas.
- Assist in developing future options and collaborations that will allow for increased development around the transload facilities.

Farm transition planning resources for farmers to utilize during preparations for intergenerational transfer or alternative forms of succession planning.

ACTION ITEMS:

- Compile a list of tools available in Kansas and the United States and complete a gap identification for determining future necessary resources.
- Work to secure farm transition presentation opportunities at regular Kansas dairy events, such as the Kansas Dairy annual meetings and KSU Dairy Days.
- Encourage existing organizations which provide farm transition resources and information to proactively seek opportunities to engage with the dairy industry.

Freedom for all business structures to do business in Kansas. Current corporate farming laws limit certain ownership structures from operating in Kansas which curtails investment and limits growth and modernization.

ACTION ITEMS:

- Update informational materials regarding farm structure, farm size, land values comparing Kansas to states with similar agricultural industries but no laws restricting ownership.
- Prepare public information — including updated information materials, information from the judicial review highlighting the decision that the laws are likely unconstitutional, and more — to be distributed to dispel myths about the effects of corporate ownership in agriculture.
- Determine best option for sharing information from above and execute.
- Develop an “ag friendly communities” designation.

Expanded partnerships between From the Land of Kansas trademark programs and on-farm dairy processors.

ACTION ITEMS:

- Increase percentage of Kansas on-farm dairy processors with membership in the From the Land of Kansas program.
- Work to secure membership of Highland Dairy Wichita plant or Dillons milk in From the Land of Kansas since both products utilize a vast majority of Kansas milk. Undertake a thorough investigation of the Udderly Kentucky brand of milk and the approach they utilized to achieve success with a major processor.

_____ Low Priority Outcomes _____

Additional K-State Research and Extension dairy personnel, including dairy extension specialists and more active engagement in extension services by dairy farmers.

Addition of dairy equipment and other industry-related services that may be needed to fill service gaps.

Policies in this document are a reflection of industry discussion and not a representation of state government.



2019 Dairy



Grow Smarter. Grow Stronger.
Grow Kansas.